

RESISTIVE FILM

ABSTRACT

A resistive film for use in a potentiometer. The film is in contact with a
5 movable wiper. The film includes a cured polymer resin and a cured
thermosetting resin. Conductive particles of carbon black and graphite are
dispersed in the film. The conductive particles cause the resins to be electrically
resistive. Carbon nanoparticles are also dispersed in the film. The nanoparticles
increase the wear resistance of the resistive film and reduce electrical noise as
10 the wiper moves across the film.